

Claims

- [c1] 1. A method comprising the steps of:
- (a) receiving location data corresponding to a plurality of probe-feature locations on a substrate;
 - (b) storing the location data;
 - (c) accessing the location data; and
 - (d) scanning the substrate based, at least in part, on the accessed location data.
- [c2] 2. The method of claim 1 , further comprising:
- (e) providing a first user interface that enables user specification of the probe feature locations.
- [c3] 3. The method of claim 2 , further comprising:
- (f) providing a second user interface that enables user selection of the location data; and
 - (g) accessing the location data based, at least in part, on the user selection.
- [c4] 4. The method of claim 2 , wherein:
- the first user interface enables user specification of the probe-feature locations by specifying one or more spacing distances between probe features.
- [c5] 5. The method of claim 2 , wherein:
- the first user interface enables user specification of the one or more probe-feature locations by specifying one or more patterns of probe feature locations.
- [c6] 6. The method of claim 2 , wherein:
- the first user interface enables user specification of the one or more probe-feature locations by specifying coordinates.
- [c7] 7. The method of claim 6 , wherein:
- the coordinates include x and y coordinates.

09682074-071701

- [c8] 8. The method of claim 6 , wherein:
the coordinates include user-specified coordinates of a reference point on the substrate.
- [c9] 9. The method of claim 6 , wherein:
the coordinates include user-specified coordinates of one or more probe-feature locations on the substrate.
- [c10] 10. The method of claim 1 , further comprising:
(e) storing the location data in an array content file in memory of a first computer.
- [c11] 11. The method of claim 10 , wherein:
the first computer is constructed and adapted to control an arrayer.
- [c12] 12. The method of claim 11 , further comprising:
(f) transferring the location data from the first computer to a memory unit of a second computer;
(g) providing a second user interface that enables user selection of the location data; and
(h) accessing the location data from the memory of the second computer based, at least in part, on the user selection.
- [c13] 13. The method of claim 12 , wherein:
the second computer is constructed and adapted to control a scanner.
- [c14] 14. The method of claim 1 , wherein:
the probe-feature locations include locations of probes of a spotted array.
- [c15] 15. The method of claim 1 , wherein:
the probe-feature locations include locations of probes of a synthesized array.
- [c16] 16. A method comprising the steps of:
(a) accessing location data corresponding to a plurality of probe-feature locations on a substrate, wherein the location data is stored in memory of a

computer; and

(b) scanning the substrate based, at least in part, on the accessed location data.

[c17]

17. A computer program product comprising:

(a) an arrayer manager application constructed and arranged to

(i) receive location data corresponding to a plurality of probe-feature locations on a substrate, and

(ii) store the location data; and

(b) a scanner control application constructed and arranged to

(i) access the location data, and

(ii) scan the substrate based, at least in part, on the accessed location data.

[c18]

18. A computer program product, comprising:

(a) a user-interface manager that

(i) enables user specification of a plurality of probe-feature locations on a substrate, and

(ii) provides location data corresponding to the probe-feature locations;

(b) a data storage manager that stores the location data in a memory unit; and

(c) an output manager enabled to provide the location data to a scanner control application constructed and arranged to scan the substrate based, at least in part, on the accessed location data.

[c19]

19. The computer program product of claim 18, wherein:

the user interface manager enables user specification of the probe-feature locations by specifying one or more spacing distances between probe features.

[c20]

20. The computer program product of claim 18, wherein:

the user interface manager enables user specification of the one or more probe-feature locations by specifying one or more patterns of probe feature

locations.

- [c21] 21. The computer program product of claim 18 , wherein:
the user interface manager enables user specification of the one or more
probe-feature locations by specifying coordinates.
- [c22] 22. The computer program product of claim 21 , wherein:
the coordinates include x and y coordinates.
- [c23] 23. The computer program product of claim 21 , wherein:
the coordinates include user-specified coordinates of a reference point on
the substrate.
- [c24] 24. The computer program product of claim 21 , wherein:
the coordinates include user-specified coordinates of one or more probe-
feature locations on the substrate.
- [c25] 25. The computer program product of claim 18 , wherein:
the data storage manager stores the location data in an array content file in
memory of a computer.
- [c26] 26. The computer program product of claim 25 , wherein:
the computer is constructed and adapted to control an arrayer.
- [c27] 27. A computer program product, comprising:
(a) a data retriever that accesses location data corresponding to a plurality of
probe-feature locations on a substrate; and
(b) a scan-area controller that controls scanning of the substrate based, at
least in part, on the accessed location data.
- [c28] 28. The computer program product of claim 27 , wherein:
the location data is stored in a memory unit of a first computer.
- [c29] 29. The computer program product of claim 28 , wherein:
the first computer is constructed and adapted to control an arrayer.
- [c30] 30. The computer program product of claim 29 , wherein:

the data retriever provides a user interface that enables user selection of the location data, and accesses the location data based, at least in part, on the user selection.

- [c31] 31. The computer program product of claim 30 , wherein:
the data retriever receives the location data from the first computer and stores the location data in memory of a second computer.
- [c32] 32. The computer program product of claim 31 , wherein:
the second computer is constructed and adapted to control a scanner.
- [c33] 33. The computer program product of claim 27 , wherein:
the probe-feature locations include locations of probes of a spotted array.
- [c34] 34. The computer program product of claim 27 , wherein:
the probe-feature locations include locations of probes of a synthesized array.
- [c35] 35. A scanning system, comprising:
(a) a scanner; and
(b) a computer program product, comprising
(i) a data retriever that accesses location data corresponding to a plurality of probe-feature locations on a substrate, and
(ii) a scan-area controller that controls scanning by the scanner of the substrate based, at least in part, on the accessed location data.
- [c36] 36. A scanning system, comprising:
(a) a computer;
(b) a scanner; and
(c) a computer program product that, when executed on the computer, performs a method comprising the steps of
(i) accessing location data corresponding to a plurality of probe-feature locations on a substrate, and
(ii) controlling scanning by the scanner of the substrate based, at least in part, on the accessed location data.